



SEQUENCE LISTING

<110> Petersdorf, Effie W.
Guo, Zhen
Hansen, John A.
Hood, Leroy
Fred Hutchinson Cancer Research Center
University of Washington

<120> Oligonucleotide Arrays for High
Resolution HLA Typing

<130> 14538A-005210US

<140> US 10/018,112

<141> Not yet assigned

<150> US 60/139,843

<151> 1999-06-17

<150> WO PCT/US00/16722

<151> 2000-06-16

<160> 141

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> HLA-B PCR probe A1, exon 2, location 5-24

<400> 1

tcacaccctc cagagcatgt

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> HLA-B PCR probe A2, exon 2, location 5-24

<400> 2

tcacatcatc cagaggatgt

20

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> HLA-B PCR probe A3, exon 2, location 5-24

<400> 3

tcacacttgg cagacgatgt

20

<210> 4
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A4, exon 2, location 5-24

 <400> 4
 tcacaccctc cagtggatgt 20

 <210> 5
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A5, exon 2, location 5-24

 <400> 5
 tcacacttgg cagaggatgt 20

 <210> 6
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A6, exon 2, location 5-24

 <400> 6
 tcacaccctc cagacgatgt 20

 <210> 7
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A7, exon 2, location 5-24

 <400> 7
 tcacaccctc cagaatatgt 20

 <210> 8
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A8, exon 2, location 5-24

 <400> 8
 tcacatcatc cagagcatgt 20

 <210> 9
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe A9, exon 2, location 5-24

 <400> 9
 tcacaccatc cagaggatgt 20

 <210> 10
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A10, exon 2, location 5-24

 <400> 10
 tcacatcatc caggtgatgt 20

 <210> 11
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A11, exon 2, location 5-24

 <400> 11
 tcacaccctc cagaggatgt 20

 <210> 12
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B1, exon 2, location 21-40

 <400> 12
 atgtacggct gcgacgtggg 20

 <210> 13
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B2, exon 2, location 21-40

 <400> 13
 atgtatggct gcgacctggg 20

 <210> 14
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B3, exon 2, location 21-40

 <400> 14
 atgtttggct gcgacgtggg 20

<210> 15
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B4, exon 2, location 21-40

 <400> 15
 atgtaaggct gcgacgtggg 20

 <210> 16
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B5, exon 2, location 21-40

 <400> 16
 atgtctggct gcgacgtggg 20

 <210> 17
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B6, exon 2, location 21-40

 <400> 17
 atgtacggct gcgacctggg 20

 <210> 18
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B7, exon 2, location 21-40

 <400> 18
 atgtttggct gcgacctggg 20

 <210> 19
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B8, exon 2, location 21-40

 <400> 19
 atgtatggct gcgacatggg 20

 <210> 20
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe B9, exon 2, location 21-40

 <400> 20
 atgtatggct gcgacgtggg 20

 <210> 21
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C1, exon 2, location 41-60

 <400> 21
 gcccgacggg cgcttcctcc 20

 <210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C2, exon 2, location 41-60

 <400> 22
 gcccgacggg cgcttcctcc 20

 <210> 23
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C3, exon 2, location 41-60

 <400> 23
 gccggacggg cgcttcctcc 20

 <210> 24
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D1, exon 2, location 61-80

 <400> 24
 gcgggcatga ccagtacgcc 20

 <210> 25
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D2, exon 2, location 61-80

 <400> 25
 gcgggcataa ccagtacgcc 20

<210> 26
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D3, exon 2, location 61-80

 <400> 26
 gcgggcataa ccagttagcc 20

 <210> 27
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D4, exon 2, location 61-80

 <400> 27
 gcgggtataa ccagttcgcc 20

 <210> 28
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D5, exon 2, location 61-80

 <400> 28
 gcgggcatga ccagtccgcc 20

 <210> 29
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D6, exon 2, location 61-80

 <400> 29
 gcgggtatga ccagtccgcc 20

 <210> 30
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D7, exon 2, location 61-80

 <400> 30
 gcgggtacca ccaggacgcc 20

 <210> 31
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe D8, exon 2, location 61-80

 <400> 31
 gcgggcatga ccagttcgcc 20

 <210> 32
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D9, exon 2, location 61-80

 <400> 32
 gcgggcataa ccagttcgcc 20

 <210> 33
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D10, exon 2, location 61-80

 <400> 33
 gcgggtatga ccaggacgcc 20

 <210> 34
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D11, exon 2, location 61-80

 <400> 34
 gcgggtataa ccagttagcc 20

 <210> 35
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D12, exon 2, location 61-80

 <400> 35
 gcgggtatga ccagtacgcc 20

 <210> 36
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe E1, exon 2, location 81-100

 <400> 36
 tacgacggca aagattacat 20

<210> 37
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe E2, exon 2, location 81-100

 <400> 37
 tacgacggca aggattacat 20

 <210> 38
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe F1, exon 2, location 111-130

 <400> 38
 gaggacctga gctcctggac 20

 <210> 39
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe F2, exon 2, location 111-130

 <400> 39
 gaggacctgc gctcctggac 20

 <210> 40
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G1, exon 2, location 131-150

 <400> 40
 cgccgcggac acggcggtc 20

 <210> 41
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G2, exon 2, location 131-150

 <400> 41
 cgcggcggac accgcggctc 20

 <210> 42
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe G3, exon 2, location 131-150

 <400> 42
 cgccgcggac aaggcggctc 20

 <210> 43
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G4, exon 2, location 131-150

 <400> 43
 cgccgcggac acggcagctc 20

 <210> 44
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G5, exon 2, location 131-150

 <400> 44
 cgccgcggac accgcggctc 20

 <210> 45
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G6, exon 2, location 131-150

 <400> 45
 cgcggcggac acggcggctc 20

 <210> 46
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H1, exon 2, location 151-170

 <400> 46
 agatcaccca gctcaagtgg 20

 <210> 47
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H2, exon 2, location 151-170

 <400> 47
 agatctccca gcgcaagttg 20

<210> 48
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H3, exon 2, location 151-170

 <400> 48
 agatcaccca gcgcaagtgg 20

 <210> 49
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe I1, exon 2, location 171-190

 <400> 49
 gaggcggccc gtgaggcgga 20

 <210> 50
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe I2, exon 2, location 171-190

 <400> 50
 gaggcggccc gtgtggcgga 20

 <210> 51
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J1, exon 2, location 191-210

 <400> 51
 gcagcggaga gcctacctgg 20

 <210> 52
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J2, exon 2, location 191-210

 <400> 52
 gcaggacaga gcctacctgg 20

 <210> 53
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe J3, exon 2, location 191-210

 <400> 53
 gcagtggaga gcctacctgg 20

 <210> 54
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J4, exon 2, location 191-210

 <400> 54
 gcagctgaga acctacctgg 20

 <210> 55
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J5, exon 2, location 191-210

 <400> 55
 gcagcggaga acctacctgg 20

 <210> 56
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J6, exon 2, location 191-210

 <400> 56
 gcagctgaga gcctacctgg 20

 <210> 57
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K1, exon 2, location 211-230

 <400> 57
 agggcgagtg cgtggagtgg 20

 <210> 58
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K2, exon 2, location 211-230

 <400> 58
 agggcctgtg cgtggagtgg 20

<210> 59
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K3, exon 2, location 211-230

 <400> 59
 agggcctgtg cgtggacggg 20

 <210> 60
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K4, exon 2, location 211-230

 <400> 60
 agggcctgtg cgtggagtcg 20

 <210> 61
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K5, exon 2, location 211-230

 <400> 61
 agggcacgtg cgtggagtcg 20

 <210> 62
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K6, exon 2, location 211-230

 <400> 62
 agggcctgtg cgtggagggg 20

 <210> 63
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K7, exon 2, location 211-230

 <400> 63
 aggacctgtg cgtggagtcg 20

 <210> 64
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe K8, exon 2, location 211-230

 <400> 64
 agggcacgtg cgtggagtgg 20

 <210> 65
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L1, exon 2, location 231-250

 <400> 65
 ctccgcagac acctggagaa 20

 <210> 66
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L2, exon 2, location 231-250

 <400> 66
 ctccgcagat acctggagaa 20

 <210> 67
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M1, exon 2, location 257-276

 <400> 67
 ggacaagctg gagcgcgctg 20

 <210> 68
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M2, exon 2, location 257-276

 <400> 68
 ggacacgctg gagcgcgcgg 20

 <210> 69
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M3, exon 2, location 257-276

 <400> 69
 ggagacgctg cagcgcgcgg 20

<210> 70
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A1, exon 3, location 01-20

 <400> 70
 gctcccactt catgaggtat 20

 <210> 71
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe A2, exon 3, location 01-20,
 two-step asymmetric PCR HLA-B Exon 2 5' primer

 <400> 71
 gctcccactc catgaggtat 20

 <210> 72
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B1, exon 3, location 21-40

 <400> 72
 ttctacacct ccgtgtcccg 20

 <210> 73
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B2, exon 3, location 21-40

 <400> 73
 ttctacaccg ccatgtcccg 20

 <210> 74
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B3, exon 3, location 21-40

 <400> 74
 ttcgacaccg ccatgtcccg 20

 <210> 75
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe B4, exon 3, location 21-40

 <400> 75
 ttccacacct ccgtgtcccg 20

 <210> 76
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B5, exon 3, location 21-40

 <400> 76
 ttccacaccg ccatgtcccg 20

 <210> 77
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B6, exon 3, location 21-40

 <400> 77
 ttctacaccg ctatgtcccg 20

 <210> 78
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe B7, exon 3, location 21-40

 <400> 78
 ttctacaccg ccgtgtcccg 20

 <210> 79
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C1, exon 3, location 41-60

 <400> 79
 gcccggtccgc ggggagcccc 20

 <210> 80
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C2, exon 3, location 41-60

 <400> 80
 gcctggccgc ggggagcccc 20

<210> 81
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe C3, exon 3, location 41-60

 <400> 81
 gcccggccgc ggggagcccc 20

 <210> 82
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D1, exon 3, location 61-80

 <400> 82
 gcttcacatc agtgggctac 20

 <210> 83
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D2, exon 3, location 61-80

 <400> 83
 gcttcacac cgtgggctac 20

 <210> 84
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D3, exon 3, location 61-80

 <400> 84
 gcttcattgc agtgggctac 20

 <210> 85
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe D4, exon 3, location 61-80

 <400> 85
 gcttcacgc agtgggctac 20

 <210> 86
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe E1, exon 3, location 81-100

 <400> 86
 gtggacgaca cccagttcgt 20

 <210> 87
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe E2, exon 3, location 81-100

 <400> 87
 gtggacggca cccagttcgt 20

 <210> 88
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe E3, exon 3, location 81-100

 <400> 88
 gtggacgaca cgctgttcgt 20

 <210> 89
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe E4, exon 3, location 81-100

 <400> 89
 gtggacgaca cgcagttcgt 20

 <210> 90
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe F1, exon 3, location 111-130

 <400> 90
 agcgacgcca cgagtccgag 20

 <210> 91
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe F2, exon 3, location 111-130

 <400> 91
 agcgacgccg cgagtccgag 20

<210> 92
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G1, exon 3, location 95-115

 <400> 92
 ttcgtgcggt tcgacagcga 20

 <210> 93
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe G2, exon 3, location 96-115

 <400> 93
 ttcgtgaggt tcgacagcga 20

 <210> 94
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H1, exon 3, location 121-140

 <400> 94
 cgagtccgag agaggagccg 20

 <210> 95
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H2, exon 3, location 121-140

 <400> 95
 cgagtccgag gatggcgccc 20

 <210> 96
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe H3, exon 3, location 121-140

 <400> 96
 cgagtccgag gacggagccc 20

 <210> 97
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe H4, exon 3, location 121-140

 <400> 97
 cgagtcgag gaaggagccg 20

 <210> 98
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe I1, exon 3, location 141-160

 <400> 98
 cgggcgccat ggatagagca 20

 <210> 99
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe I2, exon 3, location 141-160

 <400> 99
 cgggcgccgt ggggtggagca 20

 <210> 100
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe I3, exon 3, location 141-160

 <400> 100
 cgggcgccgt ggatagagca 20

 <210> 101
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J1, exon 3, location 161-180

 <400> 101
 ggaggggccc gaatttggg 20

 <210> 102
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J2, exon 3, location 161-180

 <400> 102
 agaggggccc gatttggg 20

<210> 103
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J3, exon 3, location 161-180

 <400> 103
 ggaggggccg gagcattggg 20

 <210> 104
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe J4, exon 3, location 161-180

 <400> 104
 ggaggggccg gagtattggg 20

 <210> 105
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K1, exon 3, location 181-200

 <400> 105
 accggaacac acagatctac 20

 <210> 106
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K2, exon 3, location 181-200

 <400> 106
 accggaacac acagatcttc 20

 <210> 107
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K3, exon 3, location 181-200

 <400> 107
 accgggagac acagatctcc 20

 <210> 108
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe K4, exon 3, location 181-200

 <400> 108
 accggaacac acagatctgc 20

 <210> 109
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K5, exon 3, location 181-200

 <400> 109
 accggaacac acagatctcc 20

 <210> 110
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K6, exon 3, location 181-200

 <400> 110
 accgggagac acggaacatg 20

 <210> 111
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K7, exon 3, location 181-200

 <400> 111
 accgggatac acagatctcc 20

 <210> 112
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K8, exon 3, location 181-200

 <400> 112
 accgggagac acagatctgc 20

 <210> 113
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K9, exon 3, location 181-200

 <400> 113
 accgggagac acagaagtac 20

<210> 114
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K10, exon 3, location 181-200

 <400> 114
 acggggagac acggaacatg 20

 <210> 115
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe K11, exon 3, location 181-200

 <400> 115
 accgggagac acagatcttc 20

 <210> 116
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L1, exon 3, location 201-220

 <400> 116
 aaggcccagg cacagactga 20

 <210> 117
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L2, exon 3, location 201-220

 <400> 117
 aagaccaaca cacagactta 20

 <210> 118
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L3, exon 3, location 201-220

 <400> 118
 aaggcctccg cgcagactta 20

 <210> 119
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe L4, exon 3, location 201-220

 <400> 119
 aaggccaagg cacagactta 20

 <210> 120
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L5, exon 3, location 201-220

 <400> 120
 aaggccaagg cacagactga 20

 <210> 121
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L6, exon 3, location 201-220

 <400> 121
 aagcgccagg cacagactga 20

 <210> 122
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe L7, exon 3, location 201-220

 <400> 122
 aagaccaaca cacagactga 20

 <210> 123
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M1, exon 3, location 216-235

 <400> 123
 actgaccgag agagcctgcg 20

 <210> 124
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M2, exon 3, location 216-235

 <400> 124
 acttaccgag agaacctgcg 20

<210> 125
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M3, exon 3, location 216-235

 <400> 125
 acttaccgag agagcctgcg 20

 <210> 126
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M4, exon 3, location 216-235

 <400> 126
 actgaccgag aggacctgcg 20

 <210> 127
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M5, exon 3, location 216-235

 <400> 127
 acttaccgag aggacctgcg 20

 <210> 128
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M6, exon 3, location 216-235

 <400> 128
 actgaccgag tgagcctgcg 20

 <210> 129
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe M7, exon 3, location 216-235

 <400> 129
 actgaccgag tgggcctgcg 20

 <210> 130
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> HLA-B PCR probe M8, exon 3, location 216-235

 <400> 130
 actgaccgag agaacctgcg 20

 <210> 131
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe N1, exon 3, location 231-250

 <400> 131
 ctgcgccaccg cgctccgcta 20

 <210> 132
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe N2, exon 3, location 231-250

 <400> 132
 ctgcggtatcg cgctccgcta 20

 <210> 133
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe N3, exon 3, location 231-250

 <400> 133
 ctgcggtaccc tgctccgcta 20

 <210> 134
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe N4, exon 3, location 231-250

 <400> 134
 ctgcggaacc tgctccgcta 20

 <210> 135
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe N5, exon 3, location 231-250

 <400> 135
 ctgcggaacc tgcgcgcta 20

<210> 136
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe O1, exon 3, location 251-270

 <400> 136
 ctacaaccag agcgaggacg 20

 <210> 137
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> HLA-B PCR probe O2, exon 3, location 251-270

 <400> 137
 ctacaaccag agcgaggccg 20

 <210> 138
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> two-step asymmetric PCR HLA-B Exon 2 3' primer

 <400> 138
 cggcctcgct ctggtttag 20

 <210> 139
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR amplification HLA-B Exon 3 5' primer

 <400> 139
 acccggtttc attttcagtt g 21

 <210> 140
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR amplification HLA-B Exon 3 3' primer

 <400> 140
 cccactgccc ctggtacc 18

 <210> 141
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>

<223> 15-mer poly dT spacing group

<400> 141

tttttttttt ttttt

15